

Annual Summary Report 1999

Model: 1996 BMW 2.8 liter

Car Line: 328IS, 328IA

Engine Family: TBM2.8VJGKEK Production: 8224

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 1/5/99 Finish: 1/19/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.13	3.4	0.4	0.53		2.5		
Average Emissions:	0.10	1.7	0.27	0.10		1.636		

Model: 1996 GM 4.3 liter

Car Line: C/K1500 Trucks, Astro/Safari Vans

Engine Family: TGM4.35PGFEK Production: 6606

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 1/12/99 Finish: 1/20/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.41	6.7	0.7	1.40	2.0			
Average Emissions:	0.12	1.7	0.29	0.11	0.4			

Model: 1996 Chrysler 5.2 liter

Car Line: Dakota 2WD, Grand Cherokee

Engine Family: TCR31828G1EL Production: 13330

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 1/19/99 Finish: 1/27/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.41	6.7	0.7	0.91	2.0			
Average Emissions:	0.21	3.2	0.27	0.07	0.2			

Model: 1996 Kia 1.8 liter

Car Line: Sephia

Engine Family: TKM1.8VJG1EK Production: 5095

Emissions Status: Passed

Component Defects: Defective Evaporative Hoses (See Page 13)*

Proposed Recall Fix: Replace all evaporative fuel vapor hoses and pipes at the fuel tank with improved material.

Test Dates Start: 2/2/99 Finish: 2/22/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.53		2.5		
Average Emissions:	0.14	1.6	0.19	0.02		1.927		

Model: 1996 Honda 2.7 liter

Car Line: Accord

Engine Family: THN2.7VJG1EK Production: 4880

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 2/9/99 Finish: 2/26/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.53	2.0			
Average Emissions:	0.17	1.1	0.26	0.04	0.2			

Model: 1996 GM 7.4 liter

Car Line: Suburban, Yukon

Engine Family: TGM7.4J8G1EK Production: 7637

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 3/2/99 Finish: 3/15/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.49	6.2	1.4	2.80	2.0			
Average Emissions:	0.15	1.6	0.44	0.19	0.2			

Model: 1996 Ford 3.0 liter
 Car Line: Ford Ranger/Mazda B3000
 Engine Family: TFM3.018G1EK Production: 4449
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	3/9/99	Finish:	4/14/99				
					2 Day			
					EVAP			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>	
Standards:	0.32	5.2	0.4	0.80	2.0			
Average Emissions:	0.17	1.6	0.37	0.26	1.3			

Model: 1996 Cummins 5.9 liter
 Car Line: Dodge 2500+ turbodiesel
 Engine Family: TCE359D6D1AA Production: 5600
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	3/15/99	Finish:	3/19/99				
					2 Day			
					EVAP			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>	
Standards:		15.5				4.9	0.1	
Average Emissions:	0.08	0.5	3.65			3.7	0.07	

Model: 1996 Hyundai 1.5 liter
 Car Line: Accent
 Engine Family: THY1.5VJG2FK Production: 5202
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	3/16/99	Finish:	4/2/99				
					2 Day			
					EVAP			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>	
Standards:	0.13	3.4	0.4	0.34	2.0			
Average Emissions:	0.06	0.9	0.06	0.07	0.2			

Model: 1996 GM 2.2 liter
Car Line: S-10, Sonoma Pickups
Engine Family: TGM2.218GFEK Production: 15173
Emissions Status: Passed
Component Defects: None

Proposed Recall Fix:

Test Dates Start: 3/22/99 Finish: 3/30/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.80		2.5		
Average Emissions:	0.09	2.0	0.21	0.10		0.39		

Model: 1996 Subaru 2.2 liter
Car Line: Legacy
Engine Family: TFJ2.2VJG2EK Production: 3362
Emissions Status: Passed
Component Defects: None

Proposed Recall Fix:

Test Dates Start: 4/6/99 Finish: 4/15/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.13	3.4	0.4	0.53		2.5		
Average Emissions:	0.11	1.6	0.14	0.13		0.424		

Model: 1996 Suzuki 1.3 liter
Car Line: Metro, Swift
Engine Family: TSK1.3V5GDFB Production: 5686
Emissions Status: Passed
Component Defects: None

Proposed Recall Fix:

Test Dates Start: 4/13/99 Finish: 4/23/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.53		2.5		
Average Emissions:	0.09	1.5	0.10	0.01		0.236		

Model: 1996 Chrysler 3.9 liter
Car Line: Dodge Dakota
Engine Family: TCR23928G1EK Production: 7316
Emissions Status: Passed
Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	5/4/99	Finish:	5/7/99				
						2 Day		
		<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u> <u>Particulate</u>
Standards:		0.41	6.7	0.7	1.40	2.0		
Average Emissions:		0.18	2.5	0.23	0.12	0.6		

Model: 1996 DSM 2.4 liter
Car Line: Galant
Engine Family: TDS2.4VJG2EL Production: 14606
Emissions Status: Passed
Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	5/11/99	Finish:	5/24/99				
						2 Day		
		<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u> <u>Particulate</u>
Standards:		0.13	3.4	0.4	0.50	2.5		
Average Emissions:		0.10	1.8	0.12	0.07	0.601		

Model: 1996 Nissan 3.0 liter
Car Line: Maxima, I30
Engine Family: TNS3.0VJGFEK Production: 24399
Emissions Status: Passed
Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	5/18/99	Finish:	12/15/99				
						2 Day		
		<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u> <u>Particulate</u>
Standards:		0.25	3.4	0.4	0.70	2.0		
Average Emissions:		0.09	0.9	0.31	0.13	0.7		

Model: 1996 GM 4.6 liter
 Car Line: Cadillacs, Aurora
 Engine Family: TGM4.6VJGFEL Production: 19561
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	5/25/99	Finish:	6/16/99				
					2 Day			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.32	5.2	0.4	0.53	2.0			
Average Emissions:	0.24	1.9	0.27	0.08	0.3			

Model: 1996 Mazda 1.8 liter
 Car Line: MX-5 Miata
 Engine Family: TTK1.8VJGKEK Production: 2822
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	6/8/99	Finish:	6/18/99				
					2 Day			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.53	2.0			
Average Emissions:	0.19	1.4	0.22	0.04	0.2			

Model: 1997 BMW 1.9 liter
 Car Line: 318, Z3
 Engine Family: VBM1.9VJGKFK Production: 5191
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	6/15/99	Finish:	7/14/99				
					2 Day			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.13	3.4	0.4	0.53		2.5		
Average Emissions:	0.09	0.9	0.28	0.23		1.062		

Model: 1997 Ford 5.4 liter
Car Line: Expedition/F250
Engine Family: VFM5.4J8G1FK Production: 20488
Emissions Status: Passed
Component Defects: None
Proposed Recall Fix:

Test Dates Start: 6/22/99 Finish: 6/30/99
2 Day
HC CO NOx HwyNox EVAP EVAP HC+NOx Particulate
Standards: 0.39 5.0 1.1 2.20
Average Emissions: 0.13 1.0 0.17 0.10

Model: 1997 Honda 1.6 liter
Car Line: Civic
Engine Family: VHN1.6VJG3EK Production: 41960
Emissions Status: Passed
Component Defects: None
Proposed Recall Fix:

Test Dates Start: 7/13/99 Finish: 7/29/99
2 Day
HC CO NOx HwyNox EVAP EVAP HC+NOx Particulate
Standards: 0.10 3.4 0.3 0.40 2.5
Average Emissions: 0.05 1.8 0.10 0.04 0.241

Model: 1997 Chrysler 5.2 liter
Car Line: Grand Cherokee, Dakota
Engine Family: VCR36028G1EK Production: 12801
Emissions Status: Passed
Component Defects: None
Proposed Recall Fix:

Test Dates Start: 7/22/99 Finish: 8/19/99
2 Day
HC CO NOx HwyNox EVAP EVAP HC+NOx Particulate
Standards: 0.32 4.4 0.7 1.40 2.0 2.5
Average Emissions: 0.20 3.4 0.35 0.13 0.2 0.441

Model: 1997 GM 4.3 liter
 Car Line: Astro, Safari
 Engine Family: VGM4.32PG2EK Production: 14611
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	7/28/99	Finish:	8/3/99				
					2 Day			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.16	4.4	0.7	1.40		2.5		
Average Emissions:	0.11	1.7	0.28	0.20		0.231		

Model: 1997 Nissan 4.1 liter
 Car Line: Q45
 Engine Family: VNS4.1VJG1EK Production: 4334
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	8/3/99	Finish:	8/20/99				
					2 Day			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.50	2.0			
Average Emissions:	0.12	1.3	0.19	0.07	0.2			

Model: 1997 Kia 2.0 liter
 Car Line: Sportage
 Engine Family: VKM2.01JG1EK Production: 4059
 Emissions Status: Passed
 Component Defects: None

Proposed Recall Fix:

Test Dates	Start:	8/10/99	Finish:	8/30/99				
					2 Day			
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.80		2.5		
Average Emissions:	0.15	1.5	0.15	0.07		0.327		

Model: 1997 Hyundai 1.8 liter

Car Line: Elantra

Engine Family: VHY1.8VJG1EK Production: 3479

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 8/17/99 Finish: 9/3/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.53		2.5		
Average Emissions:	0.19	0.9	0.29	0.07		0.906		

Model: 1997 GM 5.7 liter

Car Line: Camaro, Firebird, Corvette

Engine Family: VGM5.7V8G1EK Production: 4136

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 9/8/99 Finish: 10/13/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.80	2.0			
Average Emissions:	0.17	2.9	0.31	0.30	0.2			

Model: 1997 Chrysler 4.0 liter

Car Line: Grand Cherokee, Cherokee

Engine Family: VCR24228G2JK Production: 13806

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 9/14/99 Finish: 10/13/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.16	4.4	0.7	1.40				
Average Emissions:	0.06	0.8	0.22	0.03				

Model: 1997 Mercedes Benz 2.3 liter

Car Line: C230

Engine Family: VMB2.3VJGKEK Production: 5593

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 9/21/99 Finish: 9/29/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.13	3.4	0.4	0.70	2.0			
Average Emissions:	0.06	0.6	0.07	0.02	0.4			

Model: 1997 Mitsubishi 2.5 liter

Car Line: Chrysler Sebring, Dodge Avenger

Engine Family: VDS2.5VJGKEK Production: 3859

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 9/28/99 Finish: 10/8/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.50				
Average Emissions:	0.14	1.0	0.23	0.03				

Model: 1997 GM 5.0 liter

Car Line: C1500, K1500, G1500, Savana Vans

Engine Family: VGM5.0HPG1EK Production: 4622

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 10/5/99 Finish: 10/13/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.40	5.5	0.9	1.80	2.0			
Average Emissions:	0.21	2.1	0.26	0.21	0.2			

Model: 1997 Land Rover 4.0 liter

Car Line: Discovery

Engine Family: VLR4.058GFFK Production: 2273

Emissions Status: Passed

Component Defects: Evaporative system defects (See Page 13)*

Proposed Recall Fix: To be determined.

Test Dates Start: 10/12/99 Finish: 11/12/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.32	4.4	0.7	1.40		2.5		
Average Emissions:	0.26	2.3	0.38	0.49		0.874		

Model: 1997 GM 4.3 liter

Car Line: Pickups: S10, Sonoma, Hombre

Engine Family: VGM4.31PG1EK Production: 9957

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 10/26/99 Finish: 11/2/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.53				
Average Emissions:	0.14	1.7	0.28	0.11		0.745		

Model: 1997 Volvo 2.9 liter

Car Line: 960

Engine Family: VVV2.9VJGFEL Production: 2950

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 11/2/99 Finish: 11/5/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.25	3.4	0.4	0.55	2.0			
Average Emissions:	0.12	1.4	0.05	0.01	0.5			

Model: 1997 VW 2.8 liter

Car Line: Golf, Jetta, Passat

Engine Family: VVW2.8V8GFGM Production: 3442

Emissions Status: Passed

Component Defects: None

Proposed Recall Fix:

Test Dates Start: 11/9/99 Finish: 11/17/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.32	5.2	0.4	0.53	2.0			
Average Emissions:	0.14	1.2	0.20	0.04	0.3			

Model: 1997 TOYOTA 2.2 liter

Car Line: Camry

Engine Family: VTY2.2VJG3GK Production: 44619

Emissions Status: Passed

Component Defects: OBD Evap Leak Detection Failure

Proposed Recall Fix: To Be Determined

Test Dates Start: 11/16/99 Finish: 12/31/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.10	3.4	0.3	0.40		2.5		
Average Emissions:	0.06	1.0	0.14	0.04		0.218		

Model: 1997 FORD 5.0 liter

Car Line: Explorer, Mountaineer

Engine Family: VFM5.028GFEK Production: 21625

Emissions Status: Passed

Component Defects: OBD Evap Leak Detection Failure

Proposed Recall Fix: To Be Determined

Test Dates Start: 12/7/99 Finish: 12/31/99

	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>HwyNox</u>	<u>EVAP</u>	<u>2 Day EVAP</u>	<u>HC+NOx</u>	<u>Particulate</u>
Standards:	0.32	4.4	0.7	1.40		2.5		
Average Emissions:	0.15	2.2	0.12	0.16		0.377		

- * It was determined that the hydrocarbon levels in the SHED would have surpassed the safety margin for testing a vehicle with the evaporative component defect. The ARB estimates that with the evaporative component defect, the emissions levels would be greater than 8 grams/test.